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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,801	04/15/2004	M. Scott Jones	120462	6651
30330	7590	08/14/2006	EXAMINER	
MCQUAIDE BLASKO 811 UNIVERSITY DRIVE STATE COLLEGE, PA 16801			LOCKETT, KIMBERLY R	
			ART UNIT	PAPER NUMBER
			2837	

DATE MAILED: 08/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/824,801	Applicant(s) JONES, M. SCOTT	
	Examiner Kim R. Lockett	Art Unit 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/19/05.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 22-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Election/Restrictions

1. Newly submitted claims 23 and 24 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The newly elected claims are directed to a piano and fail to recite the stringed musical instrument previously recited.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 23 and 24 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 and 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gregory (20030094087) in view of Gilmore (5756913).

Gregory (20030094087) discloses the use of a unison string instrument comprising a coupling (116) positioned and fastened around and between two or more strings of at least one unison group of said instrument (see figure 11), said coupling

enabling the coupled strings to oscillate as a result of force transfer between the coupled strings effected by the mechanical connection of the coupling .

Gregory (20030094087) does not specifically disclose the specific use of enabling the coupled strings to oscillate at a consistent rate.

Gilmore (5756913) discloses the use of a unison string instrument that enables the coupled strings to be tuned at a consistent rate (column 3, lines 10-15). Gilmore further discloses the use of a crimping tool(55) that is capable of installing a coupling that supplies a level of compression sufficient for enabling the strings to oscillate in unison at a desired pitch.

Gregory (20030094087) and Gilmore do not disclose that the strings oscillate in unison.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the coupling device as disclosed by Gregory (20030094087) with crimping tool and specific tuning capabilities as disclosed by Gilmore (5756913) and the strings oscillating in unison since the coupling as disclosed by Gregory (20030094087) is coupled in the same manner as recited by the applicant to allow the strings to oscillate in unison.

3. Claims 5,6, and 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gregory (20030094087) in view of Gilmore and Ignatius.

Gregory (20030094087) and Gilmore (5756913) do not disclose the use of a shaped piece of metal.

Ignatius disclose the use of a shaped piece of metal (column 6, lines 35-40) an open curved band so that the band compresses (column 4, lines 26-40) when placed over two adjacent strings. The clip as disclosed by Ignatius also discloses the use of opposing forces on the strings (column 3, lines 60-68) thereby limiting the frequencies.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tuning device as disclosed by Gregory (20030094087) with crimping tool and specific tuning capabilities as disclosed by Gilmore (5756913) , the unison coupling and the metal material as disclosed by Ignatius in order to provide tuning and frequency control for strings for musical instruments using sturdy material.

Response to Arguments

3. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new grounds of rejection.


4. Papers related to this application may be submitted to Group 2800 by facsimile transmission. Papers should be faxed to Group 2800 via the PTO 2800 Fax Center at 703-872-9306.

For assistance in **Patent procedure, fees or general Patent questions** calls should be directed to the **Patents Assistance Center (PAC)** whose telephone number is **800-786-9199**. Assistance is also available on the Internet at www.uspto.gov.

Art Unit: 2837

Any inquiry concerning **this communication or earlier communications from the examiner** should be directed to **Kim Lockett whose telephone number is (571) 272-2067**. The examiner can normally be reached on Monday through Friday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-1988



KIMBERLY LOCKETT
PRIMARY EXAMINER